

# METHOD AND APPARATUS FOR EXTRACTING A LEFT VENTRICULAR ENDOCARDIUM FROM MR CARDIAC IMAGES

## ABSTRACT OF THE INVENTION

A method and apparatus is provided for segmenting a left ventricular  
5 endocardium in a magnetic resonance image. Image shape, size,  
gradients, intensity, and connectivity are used to locate the endocardial  
boundary. Specifically, a series of dilations and refinements to a mask  
corresponding to acquired data is performed. Variations in intensity,  
representing the endocardial boundary, are detected, and the endocardial  
10 boundary may then be clearly identified in the MR image.